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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,123	12/11/2003	Jae-Myung Back	5000-1-508	7889
33942	7590	12/07/2005	EXAMINER	
CHA & REITER, LLC 210 ROUTE 4 EAST STE 103 PARAMUS, NJ 07652			PETKOVSEK, DANIEL J	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 12/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/733,123

Applicant(s)

BAEK ET AL.

Examiner

Daniel J. Petkovsek

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 2 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on application filed December 11, 2003.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on December 11, 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Priority*

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### *Specification*

2. The abstract of the disclosure is objected to because numerous spacing errors are present in the abstract. Correction is required. See MPEP § 608.01(b).
3. The disclosure is objected to because of the following informalities: numerous spacing errors are present in the specification.

Appropriate correction is required.

### *Claim Objections*

4. Claims 1-18 are objected to because of the following informalities: numerous spacing errors are present in the claims. A fresh version of the claims is necessary, to improve the spacing of the text. Appropriate correction is required.
5. Claims 1, 3, 6, 8, 10, 11, 17, and 18 are objected to because of the following informalities:

Regarding claim 1, in the paragraph beginning “a trans-impedance...”, the line “mounted the stem”, should read, “mounted *on an upper side of* the stem”. In the paragraph beginning “waveguides mounted...”, the line “position the stem”, should read “position *on an upper side of* the stem”, in order to fulfill requirements of the mode disclosed in the specification.

Regarding claim 3, “two first metal plates”, should be replaced with “*a first and second metal plate*”, to conform with antecedent basis problems. Later in claim 3, “a second metal plate”, should now read, “a *third metal plate*”.

Regarding claim 6, the line, “the *second metal plate*”, would be corrected if the problems in claim 3 above were fixed.

Regarding claims 8, 10, and 11, the line, “the *first metal plate*”, would be corrected if the problems in claim 3 above were fixed.

Regarding claims 17 and 18, the lines, “are circular section forms”, and “are rectangular section forms”, do not fit in the claim language.

Appropriate correction is required.

#### ***Allowable Subject Matter***

6. At the time, claims 1-18 are indicated as being allowable over the relevant prior art of record, if the minor informalities as indicated above are corrected.

7. The following is a statement of reasons for the indication of allowable subject matter: the relevant prior art of record does not teach or reasonably suggest the improvement to the prior art (as cited in the specification, and in terms of the closest prior art to Kohmoto et al. U.S.P. No. 6,900,512 B2) in which waveguides are mounted to the stem in order to match impedance between a trans-impedance amplifier (TIA) and the signal leads that carry away the RF signals, these waveguides (see Figs. 3-5 of Application) acting as a medium between the TIA and the signal leads. The closest prior art of record (Kohmoto et al. ‘512; also US 2002/0136504 A1 to Boscha) does not teach or reasonably suggest that the waveguides are mounted *between/after* the

signal is output from the TIA. In particular, Boscha '504 teaches that the striplines for impedance matching are located *between the diode and the TIA*, not between the TIA and the signal leads. There is no reasonable suggestion from the prior art of record to add waveguides to the stem, as shown in Figure 3 of this Application, for the purpose of impedance matching the signals between the TIA and the signal lead(s).

### *Conclusion*

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure, with respect to the state of the art of optical receiving modules having diodes, amplifiers, and impedance matching qualities: PTO-892 form references A-E.

9. This application is in condition for allowance except for the following formal matters: the objections to the claim language of claims 1-18 are fully addressed in the "Claim Objections" section above.

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Petkovsek whose telephone number is (571) 272-2355. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Daniel Petkovsek  
November 30, 2005

*Michelle R. Connelly-Cushwa*  
MICHELLE CONNELLY-CUSHWA  
PRIMARY EXAMINER  
12/6/05